ESOPs and Retiree Wealth: Evidence from the Health and Retirement Study

**Questions:** What impact do ESOPs have on wealth in retirement? In particular, what is the relationship between prior ESOP participation and the average wealth of worker-owners once they retire? And what effect (if any) do ESOPs have on wealth inequality among retirees?

**Summary:** Using data from the 2008-2018 waves of the Health and Retirement Study, a large biennial survey of Americans over the age of 50, we find that retirees who, in their past work lives, ever reported participating in an ESOP have significantly greater wealth in retirement than non-ESOP retirees, even after taking into account their pre-retirement earnings and demographic characteristics.

While not evidence of cause and effect per se, our study is, to our knowledge, the first to estimate the impact of ESOP participation on retiree wealth using a federally-funded dataset that follows ESOP participants from work into retirement. Though wealth also appears to be more equally distributed among ESOP retirees, more research is needed to fully understand the impact that boosting ESOP participation would have on overall inequality in retirement.

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The Health and Retirement Study (HRS) is a biennial panel survey of Americans over age 50 conducted by the Institute for Social Research at the University of Michigan with support from the U.S. federal government through the National Institute on Aging and Social Security Administration. Since 1992, each wave of the HRS has interviewed around 20,000 respondents, making it the largest and most comprehensive dataset on the health and economic well-being of older Americans of the government.

Starting in 2008, the HRS began asking detailed questions about characteristics of individuals’ pension plans, including whether they participate in an Employee Stock Ownership Plan (ESOP).

Respondents are able to provide information on up to four pension plans per survey wave, and our analysis includes data from six waves covering the period 2008-2018.

The table below shows a breakdown by type of all plans reported by surveyed workers during this period; ESOPs amount to 1.3% of the total.

### Percentage of Reported Pensions in the HRS by Plan Type (2008-2018)

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>% of Reported Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESOP</td>
<td>1.3%</td>
</tr>
<tr>
<td>401(k)</td>
<td>49.7%</td>
</tr>
<tr>
<td>Supplemental Retirement Account</td>
<td>4.9%</td>
</tr>
<tr>
<td>Defined Benefit Plan</td>
<td>13.8%</td>
</tr>
<tr>
<td>401(a)/403(b)/457</td>
<td>8.9%</td>
</tr>
<tr>
<td>Thrift Savings Plan (TSP)</td>
<td>2.2%</td>
</tr>
<tr>
<td>Combination Plan</td>
<td>0.3%</td>
</tr>
<tr>
<td>IRA/Keough</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other Defined Contribution Plan</td>
<td>18.8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Effect of Prior ESOP Participation on the Average Wealth of ESOP vs Non-ESOP Retirees

- The HRS features several different measures of household wealth.
- We can assess the relationship between reported ESOP participation during the working lifetime and wealth in retirement using advanced statistical techniques.
- This allows us to take into account the effect of other relevant variables, such as whether an individual has ever had a pension (of any type), earnings prior to retirement, and survey year.
- We also account for demographic characteristics such as household size, age, gender, race, education, and most frequent region/industry of employment.
- Depending on the wealth measure considered, the estimates suggest that ESOP participants have about double the retirement wealth of otherwise similar non-ESOP individuals.
- Importantly, results are of comparable magnitude for three different wealth measures, and are statistically significant.

Average Retirement Wealth of ESOP vs. Non-ESOP Retirees

- Three times more
- Two times more
- Equal

- Total wealth
- Total wealth excluding IRA’s
- Non-housing financial wealth
ESOP Wealth Effects by Retiree Age Compared to Non-ESOP Retirees

- These results are broadly similar even when we subdivide the sample by retiree age.
- The magnitude of the effects are close to that found in the full sample of all retirees.
- When these separate age groups are examined, some of the estimates are no longer statistically significant. However, this is likely due at least in part to smaller sample sizes for each of the age subgroups, especially the aged 80+ group.
- To summarize, the chart below estimates how many times larger are retiree wealth holdings among ESOP vs. non-ESOP individuals.

The figure below shows our estimates of the effects on total wealth for five different subgroups of retired ESOP workers:

- 60-64 years old
- 65-69 years old
- 70-74 years old
- 75-79 years old
- 80+ years old

Average Retirement Wealth of ESOP vs. Non-ESOP Retirees by Age
Distribution of Wealth Among ESOP vs. Non-ESOP Retirees

- In addition to considering effects on average wealth, we can also examine how the distribution of wealth differs between ESOP and non-ESOP participants.
- The figure below shows deciles of the total wealth distributions among retirees age 60 and over who do and do not report having been ESOP participants at some point during their working lives.
- While wealth in retirement is higher for ESOP retirees at every decile, it does not appear to be more unequally distributed.
- In fact, the ratio of wealth at the 90th percentile to that at the 50th percentile – a common measure of inequality – is actually lower for ESOP participants (2.7) than for non-ESOP participants (5.9).
- Moreover, at the 90th percentile the total wealth of ESOP individuals is just under twice that of non-ESOP individuals, while at the 50th percentile it is nearly four times as large.
- However, this is simply a comparison of the existing wealth distributions for these two groups; additional analyses would be needed to make predictions about the impact that increasing ESOP participation would have on overall wealth inequality.

Deciles of the Total Wealth Distribution for ESOP vs. Non-ESOP Retirees
Conclusions

• Using data from the Health and Retirement Study (HRS), a long-running survey of older Americans supported by the U.S. government, we offer what we believe to be the first estimates of the impact of ESOPs on wealth in old age that are based on following ESOP versus non-ESOP participants from work into retirement.

• One of our key findings is that ESOP participants have about double the retirement wealth of otherwise similar non-ESOP individuals, even after taking into account pre-retirement earnings and demographic characteristics.

• We also find that ESOP individuals have greater wealth in every decile of the distribution, and that wealth seems to be somewhat more equally distributed among ESOP versus non-ESOP participants.

• However, further research is needed to clarify the likely impact that increasing ESOP participation among all workers would have on overall wealth inequality among retirees and to ensure that the benefits of worker ownership are broadly shared.

Endnotes


2. While HRS data have been released through 2020, the 2018 wave is the most recent for which the RAND files contain the sampling weights needed for our analysis.

3. This figure for ESOPs may appear somewhat lower than other estimates of the extent of ESOP participation in the economy, but this can likely be explained by the fact that many HRS respondents report plans that are actually ESOP’s as unspecified defined contribution plans instead. See, for example, Joseph Blasi and Douglas Kruse (June 2023), “Employee Ownership and ESOPs: What We Know From Recent Research.” Available at https://www.aspeninstitute.org/wp-content/uploads/2023/08/Employee-Ownership-and-ESOPs-%E2%80%94-What-We-Know-from-Recent-Research.pdf